



# UNITED STATES PATENT AND TRADEMARK OFFICE

*SM*

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/393,724	09/10/1999	W. K. MEADE II	10990944-1	3204

22879 7590 06/16/2004

HEWLETT PACKARD COMPANY  
P O BOX 272400, 3404 E. HARMONY ROAD  
INTELLECTUAL PROPERTY ADMINISTRATION  
FORT COLLINS, CO 80527-2400

EXAMINER

TRAN, DOUGLAS Q

ART UNIT	PAPER NUMBER
----------	--------------

2624

DATE MAILED: 06/16/2004

*18*

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/393,724

Applicant(s)

MEADE ET AL.

Examiner

Douglas Q. Tran

Art Unit

2624

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on RCE (3/30/04).
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-3 and 5-22 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3, 5-22 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- |   |   |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                                    |

## DETAILED ACTION

### *Request For Continued Examination*

1. The request filed on 3/20/04 for a Request For Continued Examination (RCE) Pursuant to 37 CFR 1.114, based on the Application Serial No. 09/393,724. An action on the RCE follows.

### *Claim Rejections - 35 USC § 112*

2. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

3. Claims 10-15 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

For claim 10, the limitations of “A hard copy output device..., comprising: *processing circuitry communicating* with the hard copy output device...; and *a tracking apparatus ...*”.

From the specification and fig. 2, indicates the hard copy output device including the processing circuitry, that means the processing circuitry locates inside of the hard copy output device, but not communicating with the hard copy output device which is addressed in the claim 10.

Furthermore, the specification and fig. 2 do not describe the hard copy output device comprising the tracking apparatus.

*Claim Objections*

4. Claims 1, 21 are objected to because of the following informalities: “an image forming device” is recited twice in these claims.

Appropriate correction is required.

*Claim Rejections - 35 USC § 103*

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1-3, 5-9 are rejected under 35 U.S.C. 102(e) as being anticipated by Maniwa (US Patent No. 5,933,584) and Davidson, Jr. et al. (US Patent No. 6,025,925).

As to claim 1, Maniwa teaches an apparatus (i.e., a system in fig. 1) for tracking usage information for an image forming device (i.e., printer 112 in fig. 1; col. 13, lines 48-51), comprising:

an image-forming device (112 in fig. 1);  
processing circuitry (i.e., print server software would be stored in the processing circuitry in 106 of fig. 2) associated with the image-forming device (112 in fig. 1);  
computer program code (i.e., print server software in 106 of fig. 2) implemented on the processing circuitry and operative to count page-area (an image area on the page “col. 13, lines 56-57”) and toner coverage (col. 13, lines 54-57) at the image forming device collected on a print job by print job basis (i.e., a print job, col. 13, line 51); and

memory (i.e., database) coupled with the processing circuitry and operative to store a data file (i.e., accounting data file) containing the user information (i.e., each user, "col. 13, line 55"), the output job information (i.e., page size, number of sheets, a software font "col. 13, lines 48-49, 53"), and the usage information comprising total page area (i.e., font and image on the page and number of page on the print job) and toner used (i.e., a quantity of toner "col. 13, lines 54-57").

a tracking apparatus (i.e., a print server "PS" 106 in fig. 1) configured to implement data gathering of transaction details from the image forming device including consumable usage information (col. 13, lines 48-50).

However, Maniwa does not teach the hybrid pull-push data is implemented by the tracking apparatus for gathering of transaction details from the image forming device including consumable usage information.

Davidson teaches a tracking apparatus (32 in fig. 1) configured to implement hybrid pull-push data gathering of transaction details from the image forming device (13 in fig. 1) including consumable usage information (col. 4, lines 38-46: the job accounting information including the network user's name, a job identifier number, and the usage information such as job processing time or number of sheets of paper used by each paper source; it is noted that box 212 in fig. 4A indicates the host 32 for tracking job accounting by sending command to the printer and box 232 indicates the host receiving the data from the printer. Therefore, from the above method the host 32 uses the method of hybrid pull push data for tracking the job accounting so that the host is not polled prior to a memory overflow event occurring on the printer 13).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the tracking apparatus of Maniwa for to implement hybrid pull-

Art Unit: 2624

push data gathering of transaction details from the image forming device as taught by Davidson. The suggestion for modifying the tracking apparatus of Maniwa can be reasoned by one of ordinary skill in the art as set forth by Davidson because the modified printing system would be reliable by tracking the information of the consumable usage from each of printers in the network.

As to claim 2, Maniwa teaches the data file comprising cost accounting information (col. 13, line 40) of consumables utilized by the image forming device when generating output jobs (note: the result of accounting information of print job when the print job is completed in the printout at the printer "col. 13, lines 29-32).

As to claim 3, Maniwa teaches the total page area comprises paper usage and the output job information comprises information detailing a print job (i.e., image on page, number of pages is used).

As to claim 5, Davidson teaches a plurality of image forming devices, and wherein the tracking apparatus polls the image forming devices to collect transaction details at each of the image forming devices, and wherein at least one of the image forming devices is configured to push the transaction details to the tracking device, if not polled, prior to a memory overflow event occurring on the at least one image forming device (it is noted that box 212 in fig. 4A indicates the host 32 for tracking job accounting by sending command to the printer and box 232 indicates the host receiving the data from the printer. Therefore, from the above method the host 32 uses the method of hybrid pull push data for tracking the job accounting so that the host is not polled prior to a memory overflow event occurring on the printer 13).

As to claim 6, Maniwa teaches a user interface configured to receive unique user id information from a user at the image forming device, wherein the processing circuitry receives the user id information and merges the user id information with cost data upon job completion (col. 13, lines 39-40).

As to claim 7, Davidson teaches that a domain controller (NPAP Task 100 in fig. 3), wherein a user submits a print job to the image forming device from the client computer, and wherein the domain controller verifies identification of the user (NPAP recognizes the user ID in order to report the status of the printer, col. 8, lines 30-35).

As to claim 8, Davidson teaches that the image-forming device includes a user interface (i.e., operator panel), and wherein a walk up user (i.e., operator) submits a copy job to the image-forming device via the user interface (col. 10, lines 1-3 and col. 7, lines 35-37).

As to claim 9, Davidson teaches that the user interface includes a reader operative to identify the walk up user (col. 10, lines 1-3).

7. Claims 10-22 are rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of Davidson, Jr. et al. (US Patent No. 6,025,925) and Maniwa (US Patent No. 5,933,584).

As to claim 10, Davidson teaches a hard copy output device (13 in fig. 1) usable with LAN (15 in fig. 1) and a client computer (14 in fig. 1), comprising:

Processing circuitry (i.e., NPAP circuitry 100 including NPAP response 137 in fig. 3) associated with the hard copy output device (13 in fig. 1) and operative to receive LAN data packets from the client computer over the LAN (216 in fig. 4A, col. 6, lines 61-62) that identifies a user and a print job (col. 2, lines 58-59); and

Art Unit: 2624

a memory coupled with the processing circuitry (NPAP 137 coupled with emulations manager 132 in fig. 3 in which emulations has a memory for storing job accounting information, col. 10, lines 15-17 and col. 17, lines 24-25) and operative to store a data file containing the LAN data packets and consumable usage information (the job accounting information including the network user's name, a job identifier number, and the usage information such as job processing time or number of sheets of paper used by each paper source, col. 4, lines 38-46);

a tracking apparatus (i.e., host 32 in fig. 1 for collecting alerts) configured to implement hybrid pull-push data (i.e., box 212 in fig. 4A indicates the host 32 for tracking job accounting by sending command to the printer and box 232 indicates the host receiving the data from the printer) gathering of transaction details including consumable usage information from the hard copy output device (212 and 232 in fig. 4A), the LAN (i.e., 15 or 44 or 24 in fig. 1) includes a plurality of hard copy output devices (col. 6, lines 1-2), and the tracking apparatus being configured to poll the plurality of hard copy output devices to collect the transaction details at each of the hard copy output devices (box 212 in fig. 4A), and wherein at least one of the hard copy output devices (i.e., at least one of printers such as the printer 13 in fig. 1) is configured to push the transaction details to the tracking apparatus that is not polled prior to a memory overflow event occurring on the at least one hard copy output device (it is noted that box 212 in fig. 4A indicates the host 32 for tracking job accounting by sending command to the printer and box 232 indicates the host receiving the data from the printer. Therefore, from the above method the host 32 uses the method of hybrid pull push data for tracking the job accounting so that the host is not polled prior to a memory overflow event occurring on the printer 13).



However, Davidson does not explicitly teach actual toner usage is contained in the data file.

Maniwa teaches actual toner usage is contained in the data file (col. 13, lines 54-55 and 58-60).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the data file of Davidson for containing the toner usage for each print job as taught by Maniwa. The suggestion for modifying the data file of Davidson can be reasoned by one of ordinary skill in the art as set forth by Maniwa because the printing system of Davidson would be reliable by tracking more optional information of the consumable usage such as the toner usage to each user in the network.

As to claim 11, Maniwa teaches the consumable usage information comprises paper usage and toner usage collected at the hard copy output device corresponding with print job completion (col. 13, lines 29-32 and 55).

As to claim 12, Davidson teaches that comprises a user interface configured to enable a user to input a user identification (col. 2, lines 57-58).

As to claim 13, Davidson teaches that cost information is collected at the hard copy output device on a print job by print job basis (note: accounting information is generated at a printer after each print job is done, see fig. 3, col. 10, lines 32-35).

As to claim 14, Davidson teaches that the hard copy output device increments page counts to obtain cost information (the job accounting information including number of sheets of paper used by each paper source, the purpose of the page counting for accounting or cost, col. 4, lines 42-43).

As to claim 15, Davidson teaches that an LDAP server (16 or 32 in fig. 1) and a LAN (15 in fig. 1), wherein the LDAP server maintains user information and is operative to implement consumable cost recovery (col. 6, lines 43-50).

As to claim 16, Davidson and Maniwa teach the method is performed by the apparatus of claim 10 as indicated above.

As to claim 17, Maniwa teaches of storing the consumable usage data in the memory (i.e., database) comprises storing the page usage and the toner usage in the memory associated with the data identifying the user and the print job (col. 13, lines 50-55)

As to claim 18, Davidson teaches that the data identifying a user and a print job comprises packet data including a user login name and password (col. 2, lines 57-60; col. 6, lines 61-62 and col. 11, lines 11-12).

As to claim 19, Davidson teaches that collecting packet data is carried out at a client personal computer, and further comprising generating a transaction data file including cost accounting information and generating a data file in the memory of the image forming device correlating the data identifying the user, the print job, and the cost accounting information (col. 2, lines 50-60; 14 in fig. 1, col. 6, lines 61-62).

As to claim 20, Davidson teaches that generating a print job comprises requesting a print job from a client computer and forwarding the request over a LAN (15 in fig. 1) to the image-forming device (col. 3, lines 11-14).

As to claims 21 and 22, Davidson teaches an apparatus for tracking usage information for an image forming device (13 in fig. 1), comprising:

an image forming device (13 in fig. 1);

Processing circuitry (i.e., NPAP circuitry 100 including NPAP response 137 in fig. 3) associated with the hard copy output device (13 in fig. 1);

computer program code (i.e., NPAP Task 100 in fig. 3) implemented on the processing circuitry and operative to count page-area and toner coverage at the image forming device collected on a print job by print job basis (NPAP 137 coupled with emulations manager 132 in fig. 3 in which emulations has a memory for storing job accounting information, col. 10, lines 15-17 and col. 17, lines 24-25; the job accounting information including the network user's name, a job identifier number, and the usage information such as job processing time or number of sheets of paper used by each paper source, col. 4, lines 38-46);

a tracking apparatus (i.e., host 32 in fig. 1 for collecting alerts) configured to implement hybrid pull-push data (i.e., box 212 in fig. 4A indicates the host 32 for tracking job accounting by sending command to the printer and box 232 indicates the host receiving the data from the printer) gathering of transaction details including consumable usage information from the hard copy output device (212 and 232 in fig. 4A); and

a memory coupled with the processing circuitry (NPAP 137 coupled with emulations manager 132 in fig. 3 in which emulations has a memory for storing job accounting information, col. 10, lines 15-17 and col. 17, lines 24-25) and operative to store a data file containing the user information, the output job information and consumable usage information (the job accounting information including the network user's name, a job identifier number, and the usage information such as job processing time or number of sheets of paper used by each paper source, col. 4, lines 38-46) wherein number of pages printed by the image forming device is determined by counting pages printed downstream of a fuser on an output side of the image forming device

Art Unit: 2624

(please see the signal from 128 in fig. 3 to box 134 and 137, the figure indicates the pages is printed by the print engine and the result information is transmitted to 137 in fig. 3. NPAP 137 coupled with emulations manager 132 in fig. 3 in which emulations has a memory for storing job accounting information, col. 10, lines 15-17 and col. 17, lines 24-25; the job accounting information including the network user's name, a job identifier number, and the usage information such as job processing time or number of sheets of paper used by each paper source, col. 4, lines 38-46; Therefore, number of pages printed by the image forming device is determined by counting pages printed downstream of a fuser on an output side of the image forming device).

However, Davidson does not explicitly teach actual toner usage is contained in the data file.

Maniwa teaches actual toner usage is contained in the data file (col. 13, lines 54-55 and 58-60).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify the data file of Davidson for containing the toner usage for each print job as taught by Maniwa. The suggestion for modifying the data file of Davidson can be reasoned by one of ordinary skill in the art as set forth by Maniwa because the printing system of Davidson would be reliable by tracking more optional information of the consumable usage such as the toner usage to each user in the network.

***Response to Arguments and Amendment***

8. Applicant's arguments filed 3/30/04 have been fully considered but they are not persuasive.

The previous limitation from claim 4, which is canceled and added to claim 1, depends on claim 1, not depends on claims 10, 16, 21-22. The amended claims 10, 16, 21-22 include the limitation of claim 4 which raise a new issue to these claims. Therefore, the amended claims 10, 16, 21-22 can not be entered after the final rejection.

For the above reasons, it is believed that the cited prior art fully discloses the claimed invention and the rejection stand.

***Conclusion***

Applicant's arguments with respect to claims 1-3, 5-22 have been considered but are moot in view of the new ground(s) of rejection. This action is made **non-final**.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Douglas Q. Tran whose telephone number is (703) 305-4857 or E-mail address is Douglas.tran@uspto.gov.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 305-4700.

Douglas Q. Tran  
June 07, 2004

